Remarks/Arguments

Reconsideration of this Application is requested.

The Examiner has objected to paragraph [0009] of the Specification. Paragraph [0009] has been amended to overcome the Examiner's objection.

The Examiner has objected to Claims 8 and 18. Claims 8 and 18 have been amended to overcome the Examiner's objection.

Claim 1 has been provisionally rejected by the Examiner on the grounds of non-statutory obviousness-type double patenting over co-pending Application No. 10/720,664. Claims 1, 3, 8-10, 13, 18-19 and 21-22 have been provisionally rejected by the Examiner on the grounds of non-statutory obviousness-type double patenting over co-pending Application No. 10/929,588. A Terminal Disclaimer is being filed herewith to overcome the non-statutory obviousness-type double patenting rejection.

Claims 1-19 and 21-22 have been rejected by the Examiner under 35 USC §112 for being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1-2, 4-12 and 14-19 have been amended to overcome the 35 USC §112 rejection and claims 3, 13, 21 and 22 have been cancelled.

Claims 1-4, 9-15 and 19-22 have been rejected by the Examiner under 35 USC §102(e) as being anticipated by Sharma et al. (US Publication No. 2004/0105569).

Claims 3, 13 and 20-22 have been cancelled.

Sharma discloses the following in paragraph [0093]:

> "[0093]   Next, the detector performs a correlation 610 between the transformed image block and the transformed orientation pattern 612. At a high level, the correlation process slides the orientation pattern over the transformed image (in a selected transform domain, such as a spatial frequency domain) and measures the correlation at an array of discrete positions. Each such position has a corresponding scale and rotation parameter associated with it. Ideally, there is a position that clearly has the highest correlation

> relative to all of the others. In practice, there may be several candidates with a promising measure of correlation. As explained further below, these candidates may be subjected to one or more additional correlation stages to select the one that provides the best match."

Sharma is looking for correlation between a pattern and an image at the same frequency.

Sharma discloses the following in paragraph [0201]:

> "[0201]   There are a number of ways to calculate this figure of merit. One figure of merit is the degree of correlation between a known watermark signal attribute and a corresponding attribute in the signal suspected of having a watermark. Another figure of merit is the strength of the watermark signal (or one of its components) in the suspect signal. For example, a figure of merit may be based on a measure of the watermark message signal strength and/or origination pattern signal strength in the signal, or in a part of the signal from which the detector extracts the orientation parameters. The detector may computes a figure of merit based the strength of the watermark signal in a sample block. It may also compute a figure of merit based on the percentage agreement between the known bits of the message and the message bits extracted from the sample block."

Sharma discloses obtaining a signal level in a block, not how it relates to brightness in a block.

Sharma does not disclose or anticipate step e. of Claim 1, as amended, namely, determining a correlation between the recovered watermark data for at least some of the data blocks and average brightness levels for said data blocks.

Sharma does not disclose or anticipate step e. of Claim 10, as amended, namely, determining at least one of (i) a correlation between the recovered watermark data for at least some of the data blocks and average brightness levels for said data blocks, and (ii) a correlation between the recovered watermark data and the wave vectors.

In Claims 1 and 10 and those claims dependent thereon, Applicant is comparing the average brightness levels of the data blocks. Support for average brightness levels appears in paragraph [0057] of Applicant's Specification.

An advantage of step e. of Claims 1 and 10, as amended, over Sharma is that if someone made a copy, the copy process would weaken the watermark more in light areas than in dark areas. The foregoing will make a fraudulent copy easier to detect.

Claims 6-7, 16-17, and 25 have been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Sharma in view of Murakami (US Patent No. 7,065,237).

Murakami discloses the following in col. 9, lines 10-26:

"The envelope ring pattern generator 902 is a device for generating an envelope ring pattern on the basis of the input additional information and a Fourier amplitude spectrum generated by the Fourier transformer 901. The envelope ring pattern generator 902 is further connected to the envelope ring pattern embedding unit 903.

The envelope ring pattern embedding unit 903 is a device for embedding an envelope ring pattern in a Fourier amplitude spectrum on the basis of the Fourier amplitude spectrum generated by the Fourier transformer 901, the envelope ring pattern generated by the envelope ring pattern generator 902, and the parameter which is input from the parameter input unit 906 and changes depending on the watermark strength or for each embedding. The envelope ring pattern embedding unit 903 is further connected to the inverse Fourier transformer 904."

Muakami discloses embedding an envelope ring pattern in a Fourier amplitude spectrum.

Sharma and Murakami, taken separately or together, do not disclose or anticipate step e. of claims 1 and 10, as amended.

Claim 25 has been cancelled.

Claims 8 and 18 have been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Sharma in view of Rhoads et al. (US Publication No. 2003/0215112).

Rhoads discloses the following in paragraph [0118]:

[0118] The uses to which the 128 bits of watermark data can be put in security documents are myriad. Many are detailed in the materials cited above. Examples include postal stamps encoded with their value, or with the zip code of the destination to which they are

addressed (or from which they were sent); banknotes encoded with their denomination, and their date and place of issuance; identification documents encoded with authentication information by which a person's identity can be verified, etc., etc.,"

Rhoads discloses a printed image that is a postal indicia.

However, Sharma and Rhoads, taken separately or together, do not disclose or anticipate step e. of Claims 1 and 10, as amended.

Claims 3, 13, and 20-25 have been cancelled.

In view of the foregoing amendments and remarks, it is respectfully submitted that claims 1, 2, 4-12, and 14-19, as amended, of this application are now patentable and in a condition for allowance and favorable action thereon is requested.

Please charge any additional fees that may be required or credit any overpayment to Deposit Account Number 16-1885.

If the Examiner has any questions, would the Examiner please call the undersigned at the telephone number noted below.

Respectfully submitted,

/Ronald Reichman/
Ronald Reichman
Reg. No. 26,796
Attorney of Record
Telephone (203) 924-3854

PITNEY BOWES INC.
Intellectual Property and
Technology Law Department
35 Waterview Drive
P.O. Box 3000
Shelton, CT 06484-8000